What is claimed is:

1. A method of diagnosing the presence of pathology in a biological sample, comprising the step of:

identifying a region in the biological sample containing an extracellular material;

obtaining infrared absorbance spectral data from the region containing the extracellular material; and

determining, from the infrared absorbance spectral data, whether an infrared spectral marker is found in the region containing the extracellular material, wherein finding the infrared spectral marker is indicative of presence of pathology in the biological sample.

2. A method as in claim 1, wherein the infrared spectral marker is a relative flat baseline of an infrared band at about 1280 cm^{-1}.

3. A method as in claim 2, wherein the extracellular material is connective tissue.

4. A method as in claim 1, wherein the pathology to be diagnosed is carcinoma.

5. A method as in claim 1, wherein the biological sample is a breast biopsy sample, and wherein the

pathology to be diagnosed is breast cancer.

6. A method as in claim 2, wherein the step of determining includes calculating a slope of the baseline of the infrared absorbance spectral band at about 1280 cm^{-1} from infrared absorbance spectral intensities of a first baseline point wavenumber adjacent and greater than 1280 cm^{-1} and a second baseline point wavenumber adjacent and smaller than 1280 cm^{-1}.

7. A method as in claim 6, wherein the step of obtaining infrared absorbance spectral data includes measuring the infrared absorbance spectral intensities at the first and second baseline point wavenumbers from the region containing the extracellular material.

8. A method as in claim 7, wherein the step of measuring the infrared absorbance spectral intensities includes detecting an infrared image of the biological sample at the first baseline point wavenumber and detecting an infrared image of the biological sample at the second baseline point wavenumber.

9. A method as in claim 8, wherein the steps of detecting the infrared images use a focal plane array detector having multiple pixels to detect infrared light from the biological sample.

10. A method as in claim 8, wherein the step of determining whether the infrared spectral marker is found includes subtracting the infrared image at the second baseline point wavenumber from the infrared image at the first baseline point wavenumber to generate a difference image.

11. A method as in claim 10, further including the step of presenting the difference image for viewing.

12. A method as in claim 8, wherein the steps of detecting the infrared images include illuminating the biological sample with narrow bands of infrared light at the first and second baseline point wavenumbers, respectively, through the use of narrow bandwidth infrared filters.

13. A method as in claim 6, wherein the step of calculating the slope of the baseline of the infrared absorbance spectral band at about 1280 cm^{-1} including deriving an intensity difference between infrared absorbance spectral intensities at the first and second baseline point wavenumbers and scaling the intensity difference with a corrected peak intensity of an infrared absorbance peak associated with the extracellular material.

14. A method as in claim 13, wherein the infrared absorbance peak associated with the extracellular material is at a wavenumber of about 1340 cm^{-1}.

15. A method as in claim 14, including the step of calculating the corrected peak intensity from a measured peak intensity of the infrared absorbance peak and measured baseline intensities of the infrared absorbance peak.

16. A method as in claim 6, wherein the first and second baseline point wavenumbers are about 1303 cm^{-1} and 1264 cm^{-1}, respectively.

17. A system for diagnosing presence of pathology in a biological sample supported on a supporting surface generally reflecting infrared light and generally transmitting visible light, comprising:

an infrared source for generating an input infrared beam for illuminating the biological sample;

a focal-plane array detector having multiple detection pixels for detecting infrared images of the biological sample, the biological sample including a region containing extracellular material;

infrared optical elements for focusing infrared light reflected by the supporting surface and through the biological sample to the focal-plane array detector; and

a computer connected to the focal plane array detector for receiving infrared image data, the computer being programmed to determine from infrared image data for the region containing the extracellular material whether the extracellular material exhibits an infrared spectral marker indicative of presence of pathology in the biological sample.

18. A system as in claim 17, wherein the infrared spectral marker is a relative flat baseline of an infrared band at about 1280 cm^{-1}, and wherein the computer is programmed to calculate a value of baseline slope of the infrared band at about 1280 cm^{-1} from the infrared image data.

19. A system as in claim 18, wherein the infrared source is a Fourier transform infrared spectrometer.

20. A system as in claim 18, wherein the beam path includes a first and second narrow bandwidth filters for illuminating the biological sample with infrared light of a first and second filter wavelengths adjacent and above and below, respectively, 1280 cm^{-1}.

21. A system as in claim 20, wherein the computer receives image data from the detector representing infrared images at the first and second filter wavelengths, and wherein the computer is programmed to

subtract the infrared image of the first filter frequency from the infrared image of the second infrared image to generate a difference image, and wherein a value of a pixel in the difference image corresponding to the region of the sample containing the extracellular material represents a baseline slope of the 1280 cm^{-1} band for said region.

22. A system as in claim 21, wherein the computer is programmed to derive a corrected peak intensity of an infrared absorbance peak associated with the extracellular material from the infrared image data and to scale the baseline slope of the 1280 cm^{-1} band for the region containing the extracellular material with said corrected peak intensity.

23. A system as in claim 22, wherein the beam path further includes a third narrow bandwidth filter for illuminating the biological sample with infrared light at a wavenumber corresponding to the infrared absorbance peak.

24. A system as in claim 23, wherein the wavenumber corresponding to the infrared absorbance peak is about 1340 cm^{-1}.

25. A macroscopic infrared imaging system for imaging a biological sample mounted on a supporting

surface generally reflecting infrared light and generally transmitting visible light, comprising:

an infrared source;

a focal plane array detector;

a plurality of filters having respective pass band wavelengths and insertable in an output path of the infrared source;

a single lens for directing infrared generated by the infrared source and through one of the plurality of filters to the biological sample for illumination thereof;

a second single lens for focusing infrared light reflected by the support surface and through the biological sample onto the focal plane array detector for capturing an infrared image of the sample at the pass band wavelength of said one of the plurality of filters.

26. A macroscopic infrared imaging system as in claim 25, wherein the infrared source includes a wideband infrared source and a plurality of narrow bandwidth filters insertable into an output path of the wideband infrared source.

27. A macroscopic infrared imaging system as in claim 25, wherein the infrared source includes an FT-IR spectrometer.